

DALI-Gateway S64 KNX

DALI-Gateway S128 KNX

Firmware Update



1 General

The DALI gateways S64 KNX and S128 KNX are equipped with the convenient option of performing firmware upgrades without having to remove the devices. The update is carried out via an SD card and the corresponding SD card slot on the device.

Future further developments or any necessary adjustments can thus be imported via updates without much effort.

The procedure for an update via SD card is described below.



Requirements for a firmware update

A firmware update can only be carried out using a flash memory card of the type microSD (dimensions: 11 x 15 mm). The card must have a storage capacity of at least 1 GB.



An update can only be carried out if the SD card is formatted in FAT32 format. Formatting can be done, for example, from any Windows file explorer.

2 Firmware-Update



Firmware Version 0.3.3 March 2022:

Firmware from version 0.3.3 supports **individual control** of the DALI operating devices in addition to group control.

2.1 Special notes for the update from version 0.2.x to 0.3.x and the downgrade



Please note that with firmware 0.3.3 an extensive functional expansion of the device has been made. This firmware requires the ETS application program and DCA in version "**V2**" DALI Gateway S64 KNX **V2** or DALI Gateway S128 KNX **V2** and the associated DCA DALI gateway S KNX **V2**. Commissioning with the old application and the old DCA is not possible.

If a device with firmware 0.3.3 is to be loaded with the old application (e.g. when replacing a device or expanding an existing installation), a downgrade to 0.2.8 must first be carried out.

A special downgrade file is available for this: "Firmware 0.2.8 Downgrade". When downgrading, any existing data in the device will be deleted (physical address, etc.)

All data will also be deleted when updating from version 0.2.8 to 0.3.3. The device must be reloaded with the ETS and the DALI data must be restored using the restore function in the DCA (see also the description of the application program).

2.2 How to update

To update to the new firmware version, please first unpack the zip archive that comes with this document. The archive contains the update file for both DALI gateways (S64 and S128). Depending on the desired device type, please copy the desired file directly into the root directory of the SD card.

DALI-Gateway **S64** KNX = file **D1_048.bin**

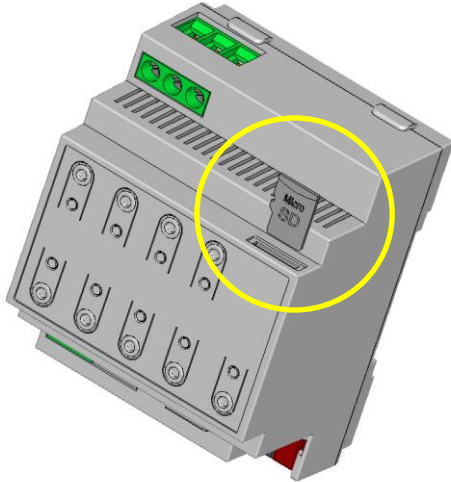
DALI-Gateway S128 KNX = file **D2_048.bin**



Caution: For all of the following work on the built-in gateway, please be sure to observe the safety regulations for work in the distributor.

The gateway, the connected electronic ballasts and any other devices in the distributor must be switched off before starting work.

For update purposes, the DALI Gateways S64 and S128 KNX have an SD card slot on the upper right edge of the device. When delivered, the opening of the slot is covered with an adhesive label. To insert a SD card, the label must be carefully removed.



After removing the label, please insert the SD card carefully into the de-energized gateway in such a way that the row of contacts on the card points downwards or the recess on the card is aligned to the left. Make sure that the card is not tilted and not inserted into the slot at an angle. At the end you will feel a slight pressure as the row of contacts snaps into the contact hole.

Once the card has been inserted, please switch on the operating voltage of the gateway while holding down the programming button at the same time.

After a few seconds, the programming LED will start flashing.

The programming button can be released while it is flashing and the update process will start.

The process only takes a few seconds and the programming LED flashes briefly once at the end and the LED “Man.” starts flashing. The Update is finished.

After the update, the gateway can be switched off again and the SD card can be removed.



Please note that the slot is covered again with the previously removed adhesive label before the voltage is switched on again.

After switching on the operating voltage, the device is ready for operation again.

The current firmware version can also be checked by reading out the device information.

3 Versions

3.1 Information Firmwareversion Delivery condition



Manufacturing date 2102 = Year 2021 / Week 02

3.2 Versions

Firmware	ETS-Application	DCA-Version	Availability	Information
0.2.8	V 1.0	DALI-Gateway S KNX	until January 2022 (Code 2202)	
0.3.3	V 2.1	DALI-Gateway S KNX V2	From February 2022 (Code 2205)	Individual control support
0.3.4	V 2.1	DALI-Gateway S KNX V2	From May 2022 (Code 2218)	Optimization: If the energy saving objects are switched on by calling them via broadcast, the delay time between sending the object and sending the DALI command is only 100msec. This is too short for some DALI ballasts → With broadcast, the telegram is sent a second time with a delay
0.3.5	V 2.1	DALI-Gateway S KNX V2	From December 2022 (Code 2252)	Optimization: When using the energy saving function, the DALI telegrams are sent 3x to the bus after switching on and controlling the actuator channel: Immediately, delayed 0.8s and delayed 1.6s. In some applications for some ECGs, 1.6s is still too fast, ECG is not yet ready for operation → Values changed to immediately, 0.8s, 2s. Only 1 channel device: When using all operating hour objects for individual ECGs, an error can occur during an ETS download (memory problem) → corrected Only 2 channel device: If the color settings are modified within scenes and saved again via the scene object, the status object for the color status is not correct after the scene is called up → corrected, color status is saved correctly and sent correctly after the scene is called up
0.3.6	V 2.1	DALI-Gateway S KNX V2	From February 2023 (Code 2308)	Only 2-channel device: If the device is started without KNX (or KNX is connected with a delay after the power supply), unwanted DALI telegrams may be sent due to missing initial data. This may lead to incorrect start values for the connected lights. → corrected, all data is correctly initialized when started without KNX.

Firmware	ETS-Application	DCA-Version	Availability	Information
0.3.7	V 2.1	DALI-Gateway S KNX V2	From July 2023 (Code 2327)	Optimization: Some new DALI-2 LED EVGs (DT-6), which also support the new device types DT-51, 52 and 53, are not recognized as LED modules during programming but as DT-0. This has no functional effect, but an incorrect ICON appears in the DCA → corrected, LED ICONS are displayed Optimization for new and subsequent installations: If there is a defective ballast in the DALI line that does not accept the programmed short address, the gateway tries to program it until a timeout aborts the process. → optimized, after two unsuccessful attempts the command "WITHDRAW" is sent and the process continues with the next ballast.
0.3.8	V 2.1	DALI-Gateway S KNX V2	From September 2023 (Code 2337)	Optimization: When using a "minimum dimming value" for absolute dimming by setting the value, the value is switched off at 0%. In some applications it is desired that the "minimum dimming value" is also set at 0%. → Firmware has been changed accordingly.
0.3.9	V 2.1	DALI-Gateway S KNX V2	From October 2023 (Code 2343)	Problem: When receiving long frame telegrams with a length >64 bytes after booting, in exceptional cases there may be problems with the KNX stack and a device reset → corrected Only 2 channel device: In very rare cases it has been observed that devices do not start after starting, but remain in the boot loader. The programming LED lights up red. → corrected by changing the start-up sequence.
0.3.10	V 2.1	DALI-Gateway S KNX V2	From August 2024 (Code 2432)	Problem: Dimming scenes via 4-bit scene dimming object only works for the groups within the scene. Individual electronic ballasts are not dimmed. → corrected, dim all lights within a scene.